REMARKS

The specification and claims 1, 2, 5, 10, 12, and 13 are amended herein. Claims 3-4 are canceled. Claims 1, 2, and 5-13 remain pending in the captioned case. Further examination and reconsideration of the presently claimed application are respectfully requested.

Information Disclosure Statement

An objection was lodged against the Information Disclosure Statement filed July 26, 2007 as failing to comply with 37 C.F.R. § 1.98(a)(2). Specifically, the foreign patent documents numbered 1, 2, and 3 were objected to as requiring an English translation. Applicants respectfully disagree in part. 37 C.F.R. § 1.98 requires an English translation only if it is in the possession, custody, or control of the Applicant. Alternatively, a concise explanation of the foreign document's relevance can be provided either in a separate document or incorporated within the Applicant's specification. Following these guidelines, we will address each foreign patent document that was not considered:

DE 4340330: an English translation of this document is not available. However, Applicants provided an English translation of the abstract. In addition, the relevance of this document is discussed on page 3 of the specification.

DE 3403650: an English translation of this document was provided in the form of corresponding U.S. Patent No. 4,807,290. The appropriate box of the Information Disclosure Statement was marked to indicate that such translation was attached to the foreign document.

DE 2516029: an English translation of this document is not available. However, Applicants have located an English translation of the International Preliminary Examination Report ("IPER") which discusses this document and its relevance to the underlying PCT application. The IPER is attached to the foreign document resubmitted herewith (separately).

These references are again submitted in an Information Disclosure Statement filed in a separate paper and their consideration is respectfully requested.

Objection to the Drawings

An objection was lodged against the drawings for failing to illustrate every feature of the claimed invention. In response thereto, the specification has been amended in a manner believed to obviate this rejection. Specifically, the specification has been amended to make clear that signals are sent across signaling line 3, and that signals can be requested over signaling line 7. It is inherent that second unit 2 encompasses a receiver, whereas only a small subsystem receiver 5 is shown, yet signaling circuit 16 is part of unit 2 which thereby makes it part of a receiver inherently contained within unit 2 as described in the specification. Moreover, with regard to the control unit described as part of the receiver in claim 10, please refer to CNTL 19 illustrated in Fig. 1. Accordingly, Applicants respectfully request removal of this objection.

Objection to the Claims

Objections were lodged against claims 1, 3, 5, 12, and 13 for various informalities. In response thereto, claims 1, 5, 12, and 13 have been amended in accordance with the Examiner's suggestions and are believed to obviate the objections. Claim 3 is canceled. Accordingly, Applicants respectfully request removal of these objections.

Section 112 Rejection

Claim 10 was rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. In response thereto, the objectionable language from claim 10 has been deleted. Accordingly, Applicants respectfully request removal of this rejection.

Section 103 Rejection

Claims 1, 2, 4-9, and 12-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,793,318 to Jewett (hereinafter "Jewett") in view of U.S. Patent No. 5,740,531 to Okada (hereinafter "Okada"). Claim 3 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Jewett, Okada, and U.S. Patent Application Publication No. 2002/0053062 to Szymanski. Claim 10 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Jewett, Okada, and U.S. Patent No. 5,007,088 to Ooi. Claim 11 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Jewett, Okada, Ooi, and U.S. Patent No. 4,835,517 to Van der Gracht. For sake of brevity, Applicants will only address the rejections of independent claims 1, 12, and 13.

To establish a case of *prima facie* obviousness of a claimed invention, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Second, there must be a reasonable expectation of success. As stated in MPEP 2143.01, the fact that references can be hypothetically combined or modified is not sufficient to establish a *prima facie* case of obviousness. *See In re Mills*, 916 F.2d. 680 (Fed. Cir. 1990). Finally, the prior art references must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d. 981 (CCPA 1974); MPEP 2143.03. Specifically, "all words in a claim must be considered when judging the patentability of that claim against the prior art." *In re Wilson* 424 F.2d., 1382 (CCPA 1970).

Moreover, in response to the recent U.S. Supreme Court decision in *KSR Int'l Co. v. Teleflex, Inc.* (U.S. 2007), new guidelines were set forth for examining obviousness under 35 U.S.C. § 103. The U.S. Supreme Court reaffirmed the *Graham* factors and, while not totally rejecting the "teachings, suggestion, or motivation" test, the Court appears to now require higher scrutiny on the part of the U.S. Patent & Trademark Office. In accordance with the recently submitted guidelines, it is "now necessary to identify the reason" why a person of ordinary skill in the art would have combined the prior art elements, or at least describe the pertinence of the prior art elements set forth in the cited disclosure, in the manner presently claimed. Moreover, even if combined, the *Graham* factors require that a determination of the differences between the

combined prior art and the claims at issue is needed. Using these standards, Applicants contend that the Office Action fails to identify the reasons for combining the cited references and, even if combined, fails to note substantial differences between the combined references and the claims at issue. Some distinctive features of the presently pending claims are set forth in more detail below.

The combination of Jewett and Okada does not teach or suggest, and adequate reasoning is not provided for such combination, to render unpatentable claims to a second combining circuit within a data receiver for combining a received signal (i.e., a first digital signal, pseudo random or random values, or Boolean combinations thereof) with the pseudo random or random values. Independent claims 1, 12, and 13 each describe a second combining unit within a data receiver that combines the received signals or a Boolean combination of the received signals with the pseudo random or random values placed into the first digital signals by the transmitter. The pseudo random or random values are combined twice -- once in the transmitter and again in the receiver.

Nowhere in Jewett is there any mention of placing pseudo random or random values into a transmitted and a received signal. Moreover, Okada teaches away from this operation. Instead of placing a PN pattern in a received signal, the PN pattern is only placed in the transmitted signal (Okada -- Fig. 1). At the receive-end, Okada specifically looks for the frame generator that would indicate the PN pattern within silent regions of the voice signal via silence notification 50 and PN pattern detector 52 (Okada -- Fig. 1). Once the PN pattern is detected, the PN pattern is then compared to a benchmark for determining bit error rate or BER via monitor 56, and thereafter the PN pattern is removed and a background noise is inserted via block 54 (Okada -- Fig. 1). The background noise is not the same as the pseudo random or random values of the PN pattern originally inserted by the transmitter or transmit-end subsystem of Okada. Similar to Jewett, Okada provides no motivation for performing a first combination and a second combination at the transmit and receive ends, respectively, using the same pseudo random or random values. Accordingly, Applicants believe the combination of Jewett and Okada does not teach the limitations of present independent claim 1, 12, and 13, as well as claims dependent therefrom.

The combination of Jewett and Okada does not teach or suggest, and adequate reasoning is not provided for such combination, to render unpatentable claims to inserting pseudo random values or random values at substantially the entirety between intervals at which the first digital signals are present. Independent claims 1, 12, and 13 each describe a combining unit (claim 1) or the steps of inserting (claims 12, 13). Present claims 1, 12, and 13 focus on generating pseudo random values or random values. Those values are placed in particular regions. As shown in Fig. 2, the values 21 are placed or inserted in regions where first digital signals 20 do not exist. Specifically, by placing the values in substantially the entirety of intervals between data signals 20 (Fig. 2), "gaps between spectral lines are substantially reduced . . ." (Specification -- pg. 4, lines 4-6, 12; pg. 7, lines 16-20; pg. 9, lines 13-18). Thus, one must keep in mind that the present claims call for pseudo random values or random values to be substantially filling the intervals between digital signals for the benefits described in the present specification.

The Office Action agrees that Jewett does not teach placing pseudo random values or random values at intervals between the first digital signals (Office Action -- pg. 5). However, contrary to the assertions made in the Office Action, Okada also fails to teach filling substantially the entirety of intervals between first digital signals with pseudo random values or random values. Instead, Okada specifically teaches detecting when voice is no longer present at the output of amplifier 12 via voice detector 44 (Okada -- Fig. 1). When a silence is detected by detector 44, start-of-frame and end-of-frame values are selected via selection pin 18 from voice detector 44 (Okada -- col. 3, lines 48-56; Fig. 1). After the start signal, selection input of selector 18 selects the pseudo random pattern from generator 48, and then the end signal from frame generator 46 (Okada -- col. 3, lines 48-56; Fig. 1). The start-of-frame and end-of-frame signals and the intervening pseudo random data occur at roughly 5 msec intervals, and not the entire silence interval (Okada -- Fig. 5, describing a silence on the voice signal A with bursts of PN pattern being at 5 msec intervals, not the entirety in which the voice signal is silent). Contrary to Okada, present Fig. 2 illustrates and claims 1, 12, and 13 describe inserting values in substantially the entirety of intervals in which first digital signals are absent. Clearly, when reading Okada, a skilled artisan would not be motivated to fill the entirety of the silence interval

with pseudo random or random values since, in fact, the purpose of Okada is to measure BER using only the short bursts at 5 msec intervals since TDM is required for mobile communication.

For at least the reasons set forth above, Applicants believe the combination of Jewett and Okada does not teach the limitations of present independent claims 1, 12, and 13, as well as claims dependent therefrom. Accordingly, removal of this rejection is respectfully requested.

CONCLUSION

The present amendment and response is believed to be a complete response to the issues raised in the Office Action mailed April 27, 2007. In view of the amendments and remarks presented herein, Applicants assert that pending claims 1, 2, and 5-13 are in condition for allowance. If the Examiner has any questions, comments or suggestions, the undersigned attorney earnestly requests a telephone conference.

No fees are required for filing this amendment; however, the Commissioner is authorized to charge any additional fees which may be required, or credit any overpayment, to Daffer McDaniel, LLP Deposit Account No. 50-3268.

Respectfully submitted,

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